



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

MAR 12 2015

OFFICE OF  
COMPLIANCE AND ENFORCEMENT

Reply to: OCE-127

**Certified Mail Number - Return Receipt Requested**

Ms. Stacy Charboneau  
Manager  
U. S. Department of Energy  
Richland Operations Office  
P. O. Box 550  
Richland, Washington 99352

Re: **Notice of Violation**  
U.S. Department of Energy, Richland, Washington  
EPA ID Number WA7 89000 8967

Dear Ms. Charboneau:

This Notice of Violation ("NOV") is to inform the U. S. Department of Energy, Richland Operations Office ("Energy") of violations of the Resource Conservation and Recovery Act, as amended (RCRA). These violations were identified as a result of inspections performed by the U.S. Environmental Protection Agency (EPA) on April 1-2, May 19-21 and July 14-15, 2014 at Energy's Hanford facility in Richland, Washington. The purpose of the inspections was to determine the facility's compliance with its dangerous waste permit, dangerous waste generator standards, universal waste management standards, and used oil management standards (WAC 173-303). The inspection was performed pursuant to EPA inspection authority under Section 3007 of RCRA, 42 U.S.C. § 6927.

From the observations made during the inspections, the following RCRA violation were identified at the facility:

**Violation 1 –Container Management at Central Waste Complex (CWC) Inside Storage Areas**

Pursuant to Permit Condition I.A.1, the storage of dangerous waste in Buildings 2403WA and 2403WB in the CWC is subject to the requirements of WAC 173-303-400 as those units were reportedly operating under interim status at the time the Permit was issued. WAC 173-303-400(3)(a) requires, among other things, compliance with the container management standards of 40 C.F.R. § 265 Subpart I, including 40 C.F.R. §265.171. 40 C.F.R. §265.171 requires that if a container of dangerous waste is not in good condition, the owner or operator must transfer the dangerous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of 40 C.F.R. Part 265.

During the April 2014 inspection, it was revealed that:

- a. Numerous containers of dangerous waste in Building 2403WA were not in good condition, in that they were heavily corroded. These drums were the drums in which the waste had originally been buried and subsequently recovered.
- b. Numerous containers of dangerous waste in Building 2403WB were not in good condition, in that they were heavily corroded. These drums were the drums in which the waste had originally been buried and subsequently recovered.

## **Violation 2 – Container Management at CWC Outside Storage Areas**

The June 26, 2013 Consent Agreement and Final Order (CAFO), Docket number RCRA 10-2013-0113, at Section 4.4.c requires, among other things, that the Central Waste Complex Outside Storage Area A be operated in compliance with all applicable final facility standards pursuant to WAC 173-303-600(1). WAC 173-303-600(1) requires, among other things, compliance with the container management standards at WAC 173-303-630.

- a. WAC 173-303-630(2) states that if a container begins to leak, the owner or operator must transfer the dangerous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the requirements of chapter 173-303 WAC. During the April 2014 inspection, it was revealed that Container 231-Z-DR-11 was not in good condition, in that this container of dangerous waste was leaking, with the leakage being collected in two 5-gallon containers. The contents of the leaking container 231-Z-DR-11 had not been transferred to a container in good condition or managed in a manner that otherwise complies with the requirements of chapter 173-303 WAC since the leak started on or about December 20, 2011. As indicated below, the container was not being managed in a manner that complies with the requirements of chapter 173-303 WAC.
- b. WAC 173-303-630(3) states that the owner or operator must label containers of dangerous waste in a manner which adequately identifies the major risk(s) associated with the contents of the container. During the April 2014 inspection, it was revealed that the two 5-gallon containers that contained leakage from container 231-Z-DR-11 did not have labels identifying the major risk(s) associated with the contents of the containers. The containers were not marked with the words "Hazardous Waste," "Dangerous Waste" or any other indication as to the nature of their contents or the risks associated with their contents.
- c. WAC 173-303-630(6) states that, at least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion, deterioration, or other factors.
  - i. During the April 2014 inspection, it was revealed that in Outside Storage Area A in the CWC, many retrieved burial boxes were completely covered with tarps, which would preclude the ability of Energy inspectors to assess the condition of the container during weekly inspections. Among other things, it was impossible for anyone inspecting the container to determine if these containers were deteriorating, and leaks were not able to be detected unless the leakage happened to escape from the under the tarp.

- ii. During the April 2014 inspection, record reviews revealed that the inspection checklists used for outside storage areas at the CWC did not establish that all of the areas, including Area A, were inspected on a weekly basis. For example, on the checklists dated September 6, 2013, January 9, 2014, January 16, 2014, January 23, 2014, February 5, 2014, March 13, 2014, and March 26, 2014, the inspector stated that a single “Outside Storage Area” was inspected. On other occasions, the plural “Outside Storage Areas” was used; however, in all cases, the checklist did not indicate which areas were inspected nor, if observations were noted, in which area(s) such observations were found.

### **Violation 3 – Contingency Planning**

WAC 173-303-350(3)(f) requires, among other things, evacuation routes and alternate evacuation routes where there is a possibility that evacuation could be necessary. During the April 2014 inspection, it was revealed that no evacuation routes were contained in the CWC contingency plan; rather, the CWC Building Emergency Plan stated that evacuation routes will be determined on a case-by-case basis depending on the situation and communicated to affected staff by radio or bull horns.

### **Violation 4 – Universal Waste Lamp Containers**

WAC 173-303-573(20)(c)(ii) requires, among other things, that a container holding universal waste lamps from a large quantity generator must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

During the May 2014 inspection, it was revealed that, at the 400 Area Centralized Consolidation and Recycling Center (CCRC):

- a. A container holding universal waste lamps that were dangerous waste, the universal waste UW bulb container, was not closed, in that the container was not long enough to encompass the lamps therein such that the ends of the bulbs were sticking out of the box and held in place with masking tape.
- b. A container holding universal waste lamps that were dangerous waste was not closed, was not structurally sound, and was damaged such that the contents of the container could leak under reasonably foreseeable conditions, in that there was a large hole in its side.

### **Violation 5 – Tank Testing and Secondary Containment**

WAC 173-303-800 requires the owner and operator of a dangerous waste facility that treats, stores or disposes of dangerous waste to obtain a permit. Subject to certain conditions, WAC 173-303-200(1) allows certain generators to accumulate dangerous waste in tanks for ninety days or less provided that, among other things, the generator complies with WAC 173-303-640(2) through (10). During the July 2014 inspection, facility representatives indicated that the leachate collection tanks at Low Level Burial Ground (LLBG) 31 and 34 were being operated as less than ninety 90 day accumulation tanks.

- a. WAC 173-303-640(2)(a) states that, for each existing tank system, the owner or operator must determine that the tank system is not leaking or unfit for use and must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that attests to the tank

system's integrity. During the July 2014 inspection, records reviewed indicated that an engineer with CHPRC, an operator of the facility, reviewed and certified the most recent integrity assessments in 2013 for the leachate collection tanks at LLBG 31 and 34, rather than an independent engineer. An employee of the operator of a facility is not an independent qualified registered professional engineer as that term is defined at WAC 173-303-040.

- b. WAC 173-303-640(2)(e) requires, among other things, that the owner or operator must develop a schedule for conducting integrity assessments over the life of the tank to ensure that the tank retains its structural integrity and will not collapse, rupture, or fail. The schedule must be based on the results of past integrity assessments, age of the tank system, materials of construction, characteristics of the waste, and any other relevant factors. During the July 2014 inspection, it was revealed that neither of the leachate collection tanks at LLBG 31 and 34 had a schedule for conducting integrity assessments. According to Mr. Dave Gillis of CHPRC, Trench 31 and 34 unit manager, no such schedule existed.
- c. WAC 173-303-640(4)(c)(iv) requires, among other things, that spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within twenty-four hours, unless the owner or operator can demonstrate that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours. At the time of the July 2014 inspection, record reviews revealed that liquid remained in the secondary containment for the leachate collection tanks at LLBG 31 and 34 for greater than twenty-four hours. For example, frozen water in the containment for Tank 31 had turned to liquid on February 13, 2014, but was not removed until approximately March 20, 2014. Also, liquid water remained in the containment for Tank 34 from February 12, 2014 to July 20, 2014.

#### **Areas of concern**

- 1. WAC 173-303-573(22) states that large quantity handlers of universal waste lamps may accumulate universal waste for no longer than one year from the date the universal waste is generated, unless such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. During the May 2014 inspection, Ms. Candace Marple, manager of the CCRC, stated that individual generation sites throughout the facility accumulate universal waste lamps for up to a year after the time of generation, prior to delivering the lamp(s) to the CCRC, where the lamps may be accumulated for up to one additional year.
- 2. The annual LDR Report is intended, among other things, to document each mixed waste at the Hanford facility which is subject to Land Disposal Restrictions (LDR) and is being stored prior to treatment necessary to satisfy applicable LDR treatment standards.
  - a. Pursuant to the March 29, 2000 Final Determination, Energy's annual LDR Reports must include a Storage Report that provides, among other things, a "specific identification and description for each and all mixed wastes at Hanford," including but not limited to the applicable waste codes and state-only waste designations. A review of the LDR Report dated April 11, 2013 revealed that neither applicable waste codes nor state-only designations were included in the Report.

- b. Pursuant to the March 29, 2000 Final Determination, Energy's annual LDR Reports must include "a schedule for... processing backlogged and currently generated mixed wastes." A review of the LDR Report dated April 11, 2013 revealed that schedules were not included for processing backlogged mixed wastes, such as those observed in CWC buildings during the April 2014 inspection.
3. During the April 2014 inspection, it was revealed that the lighting in Building 2403WA was not functional, such that flashlights were necessary for entry into the building, even though a work order had apparently been initiated for this repair.
4. During the April 2014 inspection, it was revealed that spill control and decontamination equipment in the CWCMO-289 trailer, which services the CWC area, was not in service from approximately December 5, 2013 to February 5, 2014. It was not clear that spill control equipment was readily available elsewhere on the facility.
5. During the April 2014 inspection, it was revealed that several areas of the Hanford facility had their own Building Emergency Plan (BEP). It was not clear how different BEPs would work together if an emergency originated in one area and spread to a second area.
6. During the April 2014 inspection, record reviews revealed that if a problem was identified during a weekly inspection at the CWC, and a repair order tracking number had been assigned, subsequent weekly inspections would indicate that the problem had been resolved because the repair order action tracking number had been assigned, whether or not the problem had actually been physically resolved. The subsequent inspection checklist therefore was not accurate. WAC 173-303-630(6) requires that inspection logs include a notation of the date and nature of any repairs or remedial actions taken.
7. During the July 2014 inspection, it was revealed that if a problem was noted during a weekly inspection at Trenches 31 and 34, it was difficult to determine exactly when the problem was resolved and what had been done to resolve it because it appeared that a repair order tracking number can be assigned to multiple problems identified during a given inspection, and/or the people conducting the inspections were not consistent in continuing to document that an issue still persisted prior to resolving it. WAC 173-303-630(6) requires that inspection logs include a notation of the date and nature of any repairs or remedial actions

### **Required Action**

The above violations may subject Energy to enforcement action under Section 3008 of RCRA, 42 U.S.C. § 6928, including an action to assess civil penalties. Within fifteen (15) days of receipt of this NOV, EPA requests that Energy submit a written response that identifies all actions the Facility has taken or will take to correct the violations described above and the time frame for completing such action. EPA also requests that Energy include a written response concerning the Areas of Concern listed above.

Please send all material submitted in response to this NOV to:

Kevin Schanilec  
Air-RCRA Compliance Unit, OCE-127  
U.S. Environmental Protection Agency  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101

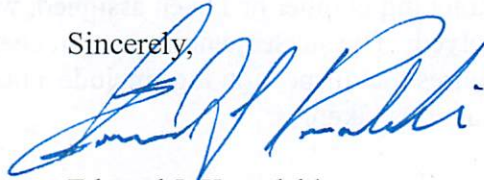
### **EPA Reservation of Rights**

Notwithstanding this NOV or Energy's response, EPA reserves the right to take any action pursuant to RCRA, the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, or any other applicable legal authority including, without limitation, the right to seek injunctive relief, implementation of response actions or corrective measures, cost recovery, monetary penalties, and punitive damages. Energy's response to this NOV does not constitute compliance with RCRA.

Nothing in this NOV or Energy's response shall affect Energy's duties, obligations, or responsibilities with respect to the Facility under local, state, or federal law or regulation.

Thank you for your prompt attention to this important matter. If you have any questions relating to this NOV, you may consult with EPA. Legal questions should be directed to Andrew Boyd, Assistant Regional Counsel, at 206-553-1222. Technical questions should be directed to Kevin Schanilec, Senior Enforcement Engineer, of my staff at 206-553-1061.

Sincerely,



Edward J. Kowalski  
Director

cc: Jane Hedges  
Washington State Department of Ecology  
Nuclear Waste Program

Dennis Faulk  
EPA Hanford Project Office